

IN THE CLAIMS

1. (Currently Amended) A computer-implemented method of processing a chain of database management messages exchanged between a management center device and a plurality of distributed subscriber database devices databases,

wherein each management message member of this chain comprises a chain header and a chain identifier, the method comprising the steps of:

creating by the management center device a conditional block for each management message member of said chain, said conditional block indicating at least one of the following conditions:

the management message member associated with the conditional block is to be processed without reference to all or part of other message members of the chain,

the management message member associated with the conditional block is to be processed with reference to at least one of other message members of the chain;

at least one management member of the chain containing a conditional block indicating a condition wherein said management message member is to be processed with reference to at least one of other message members of the chain;

adding by the management center device said conditional block to each of said respective management message members of said chain; and

transmitting by the management center device the chain of database management messages between a management center and a plurality of distributed subscriber database devices databases;

reading at a subscriber database device, the conditional block of the received management message of said chain;

determining at a subscriber database device whether processing of a received message is subject to a condition in the corresponding conditional block;

managing a table in the subscriber database device, containing an information representing a processing state of each member of the chain,

determining by the subscriber database device from said table which are the message members of said chain that have been processed;

if the processing of the received message is not subject to a condition, immediately processing said message by the subscriber database device;

if the received message is subject to a condition, determining by the subscriber database device from said table whether the condition has been fulfilled;

if the condition has been fulfilled, immediately processing said message by the subscriber database device;

if the condition has not fulfilled, locally storing said message ~~and later processing the message when the condition is fulfilled by the subscriber database device~~;

~~after the message has been locally stored, reading the memory of the subscriber database device and determining that the condition associated with the locally stored message has been fulfilled; and~~

~~processing the locally stored message after determining that the condition associated with the locally stored message has been fulfilled;~~

updating by the subscriber database device said table when a message member of said chain is successfully processed.

2. (Cancelled).

3. (Currently Amended) A method according to claim 1, wherein the method further comprises the steps of:

resetting said table either on request of the managing center or after a predefined time.

4. (Previously Presented) A method according to claim 1, wherein the subscriber database is connected to a subscriber unit and wherein it comprises the step of storing the management messages in a memory of the subscriber unit and of presenting them on request to the subscriber database.

5. (Previously Presented) A method according to claim 4, wherein the method comprises the steps of storing incoming messages in series, each incoming message causing an increment of a stack pointer of incoming messages, and of allowing a direct access to the messages requested by the subscriber database.

6. (Previously Presented) A method according to claim 4, wherein the memory of the subscriber unit is configured as a serial buffer memory having a fixed length.

7. (Currently Amended) A method according to claim 4, wherein the method comprises the steps of receiving in the subscriber database device [[,]] a message member of a chain, and of allocating in the subscriber database device [[unit]], the memory necessary for receiving all the members of this chain.

8. (Currently Amended) A method according to claim 4, wherein the method comprises the steps of requesting the subscriber database device module to compose a management message describing its software and hardware resources and of sending said message either to the subscriber database device or to the management center device.

9. (Currently Amended) A method according to claim 8, wherein the request is transmitted, either by the management center device under the form of a management message, or by the subscriber database device under the form of an instruction on an I/O line.

10. (Currently Amended) A system for processing a chain of database management messages, comprising:

(a) a management center device adapted to transmit said chain of database management messages, wherein said chain of messages comprises a plurality of management message members, each management message member of the chain comprising a header, a chain identifier, a chain index, and a conditional block indicating at least one of the following conditions:

the management message member associated with the conditional block is to be processed without reference to all or part of other message members of the chain; and

the management message member associated with the conditional block is to be processed with reference to at least one of other message members of the chain; at least one management member of the chain containing a conditional block indicating a condition wherein said management message member is to be processed with reference to at least one of other message members of the chain;

(b) a plurality of subscriber units, each of the subscriber units adapted to receive said chain of database management messages, wherein each subscriber unit comprises a subscriber database located in a security module and wherein, said subscriber unit is adapted to:

read the conditional block of a received management message member of said chain;

determine whether the processing of the received message is bound to a condition;

manage a table containing information representing a processing state of each member of the chain;

determine from said table which message members of said chain have already been processed;

if the received message is not bound to a condition, immediately processing said message;

if the received message is subject to a condition, determine whether the condition has been fulfilled;

if the condition is fulfilled, process the message immediately;

if the condition has not been fulfilled, locally store ~~storing~~ said message and later processing the message when the condition is fulfilled;

after the message has been locally stored, read the memory of the subscriber database device and determine that the condition associated with the locally stored message has been fulfilled;

process the locally stored message after determining that the condition associated with the locally stored message has been fulfilled; and

update ~~updating~~ said table when a message member of said chain is successfully processed.

11. (Cancelled).

12. (Previously Presented) A system according to claim 10, wherein the security module includes a message manager able to store in a memory an information representing a processing state of each message of the chain, and wherein the security module includes a state comparator

adapted to compare said processing state of each message of said chain with the condition expressed in the conditional block of the message currently processed.

13. (Previously Presented) A system according to claim 10, wherein the subscriber unit includes a memory for messages, wherein each incoming message causes the displacement of an input pointer in the memory, and wherein the security module is adapted to read and process these messages.

14. (Previously Presented) A system according to claim 12, wherein the subscriber unit includes a connection line towards the security module and wherein said subscriber unit is adapted to determine the size of the memory according to instructions received from the security module and to reply to the security module by composing and sending a management message to said module.

15. (Previously Presented) A system according to claim 12, wherein the subscriber unit includes a selection module to operably connect a management message separator, a processing center of the subscriber module, the security module and the memory, and wherein said subscriber unit is adapted to recognize the management messages destined only to the processing center and to forward these messages to the processing center.

16. (Currently Amended) A method of exchanging, between a management center device and a plurality of distributed subscriber database devices databases, a chain of database management messages comprising a plurality of management message members, the method comprising the steps of:

determining by the management center device dependencies between management message members to be sent as part of the chain of management messages, wherein each management message member comprises a chain header and a chain identifier and wherein said

chain identifier identifies the order of transmission of said management message members of said chain;

using by the management center device said dependencies to create a conditional block for each management message member, wherein said conditional block determines a permissible order of processing of each management message member forming a chain of management member messages;

inserting by the management center device said conditional block into said management message member;

transmitting by the management center device said management message member from the management center to at least one subscriber database;

managing at the subscriber database device a table containing information representing a processing state of each member of the chain;

determining at the subscriber database device whether the processing of each of the management message members received from the management center is subject to a condition;

processing at the subscriber database device each management message member not subject to a condition immediately;

processing at the subscriber database device each management message member that is subject to a condition immediately if the condition is fulfilled;

locally storing at the subscriber database device each management message member that is subject to a condition that has not been fulfilled and later processing the management message member when the condition has been fulfilled; and

updating a table in the subscriber database device containing information representing a processing state of other members of the chain.

17. (Cancelled).

18. (Currently Amended) A method of receiving a chain of database management messages from a management center device at a plurality of distributed subscriber database devices databases, the method comprising the steps of:

receiving at a subscriber database device at least one management message member that is part of said chain of database management messages, wherein each management message member of said chain comprises a chain header, a chain identifier, and a conditional block;

reading at [[a]] the subscriber database device, the conditional block of the received management message of said chain;

determining at the subscriber database device whether the processing of each of the management message members received from the management center is subject to a condition in the conditional block;

processing at the subscriber database device each management message member not subject to a condition immediately;

processing at the subscriber database device each management message member that is subject to a condition immediately if the condition is fulfilled;

locally storing at the subscriber database device each management message member that is subject to a condition that has not been fulfilled for processing when the condition has been fulfilled.

determining at the subscriber database device from said table which are the message members of said chain that have already been processed;

if the processing of the received message is not bound to a condition, immediately processing said message;

if the received message is bound to a condition, determining from said table whether the condition is fulfilled;

if the condition is fulfilled, immediately processing said message;

if the condition is not fulfilled, locally storing said message and processing said message when the condition is fulfilled;

updating said table when a message member of said chain is successfully processed.

19. (Cancelled).

20. (Cancelled).